## ABSTRACT

The present invention relates to a process for the preparation of dimethylcumenes comprising alkylating a substrate comprising of one or more xylene isomers with an alkylating agent in the presence of a solid acid zeolite catalyst selected from ultrastable zeolite Y (Si/Al = 5 to 50) and Beta (Si/Al = 10 - 120), and separating the products formed in vapour phase.